



PATENT
Customer No. 22,852
Attorney Docket No. 10189.0001

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of inspecting an electrical characteristic of a to-be-inspected object, comprising:
bringing pairs of probe pins into contact with respective electrodes of at least one to-be-inspected object;
simultaneously applying a voltage to the respective inspection electrodes via the pairs of probe pins by drivers of a tester, the driver being connected to the respective pairs of probe pins, thereby causing a fritting phenomenon, in which a predetermined potential inclination is formed and a current flows to break an oxide film, to occur between tips of each pair included in the pairs of probe pins; and
applying an inspection signal from the drivers to the electrodes of the to-be-inspected object via the respective pairs of probe pins, thereby inspecting an electrical characteristic of the to-be-inspected object by a tester,[[.]]
wherein the fritting voltage and the inspection signal are applied via identical signal lines between the drivers of the tester circuit and said first probe pins.

2. (Previously Presented) The method according to claim 1, wherein:
the driver transmits the inspection signal via respective electrical connection lines connecting the driver to the respective probe pins

included in the pairs of probe pins; and

respective drivers apply a voltage, which causes a fritting phenomenon, to the respective electrodes via the electrical connection lines and the respective pairs of probe pins.

3. (Previously Presented) The method according to claim 2, wherein the applying the voltage by the drivers which are connected to the respective pairs of probe pins to the respective electrodes via the electrical connection lines and the respective pairs of probe pins includes sequentially applying the voltage to the electrodes instead of simultaneously applying the voltage to the electrodes.

4. (Previously Presented) The method according to claim 2, wherein when the voltage applied by the drivers to the respective electrodes reaches a predetermined limit value, when a current resulting from the voltage reaches a predetermined limit value or when the current shows a predetermined change, application of the voltage to the electrodes by the drivers is stopped.

5. (Currently Amended) An apparatus for inspecting an electrical characteristic of a to-be-inspected object, comprising:
pairs of probe pins to be brought into contact with respective electrodes of at least one to-be-inspected object;
drivers of a tester connected to the respective pairs of probe pins via

signal lines to simultaneously apply a voltage to the respective electrodes, thereby causing a fritting phenomenon, in which a predetermined potential inclination is formed and a current flows to break an oxide film, occurring between tips of each pair included in the pairs of probe pins, as a result of application of the voltage; and a tester which transmits, after the fritting phenomenon occurs, an inspection signal to the electrodes of the to-be-inspected object via the signal lines and using the driver, thereby inspecting an electrical characteristic of the to-be-inspected object.

6. (Previously Presented) The apparatus according to claim 5, further comprising:

pairs of probe pins to be brought into contact with the respective electrodes; electrical connection lines connecting the driver to the respective pairs of probe pins;

the drivers provided in the tester, circuit, the drivers being connected to the respective pairs of probe pins to apply the drivers applying a voltage, which causes a fritting phenomenon to the respective electrodes, and wherein the electrical connection lines transmit the inspection signal from the tester and the voltage from the drivers to the respective electrodes of the to-be-inspected object.

7. (Previously Presented) The apparatus according to claim 6, wherein the driver is provided in the tester, and has a function of sequentially applying a voltage to the respective electrodes in addition to simultaneously applying a voltage to the respective electrodes.

8. (Previously Presented) The apparatus according to claim 7, further comprising:

comparators connected between the respective drivers and the respective pairs of probe pins, the comparators detecting at least one of whether the voltage applied by the drivers to the respective electrodes reaches a predetermined limit value, whether a current resulting from the voltage reaches a predetermined limit value, and whether the current shows a predetermined change,

and wherein when the comparators detect whether one of the voltage and a current reaches the predetermined limit value, the drivers stop application of the voltage to the probe pins.

9. (Previously Presented) A method of inspecting an electrical characteristic of a to-be-inspected object, comprising:

bringing pairs of probe pins into contact with respective electrodes of at least one to-be-inspected object;

sequentially applying a voltage to the respective inspection electrodes via the pairs of probe pins by drivers connected to the respective pairs of probe pins, thereby causing a fritting phenomenon, in which a predetermined potential inclination is formed and a current flows to break an oxide film, to occur between tips of each pair included in the pairs of probe pins; and

applying an inspection signal by the respective drivers to the electrodes of the to-be-inspected object via the respective pairs of probe pins, thereby inspecting an

electrical characteristic of the to-be-inspected object by a tester, wherein each driver transmits the inspection signal and the voltage via electrical connection lines connecting the driver to the respective probe pins included in the pairs of probe pins.

10. (Previously Presented) The method according to claim 9, wherein when the voltage applied by the drivers to the respective electrodes reaches a predetermined limit value, when a current resulting from the voltage reaches a predetermined limit value or when the current shows a predetermined change, application of the voltage to the electrodes by the drivers is stopped.